



United States  
Department of  
Agriculture

Marketing and  
Regulatory  
Programs

Animal and  
Plant Health  
Inspection  
Service



# **Proposed Rule for Mexican Hass Avocado Import Program Expansion**

## **Final Environmental Assessment, October 2001**

# **Proposed Rule for Mexican Hass Avocado Import Program Expansion**

## **Final Environmental Assessment, October 2001**

### **Agency Contact:**

Wayne D. Burnett  
Senior Import Specialist  
Import and Interstate Services  
Plant Protection and Quarantine  
Animal and Plant Health Inspection Service  
U.S. Department of Agriculture  
4700 River Road, Unit 140  
Riverdale, MD 20737-1236

---

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

# Table of Contents

I.	Need for Proposed Action . . . . .	1
A.	Introduction . . . . .	1
B.	Need . . . . .	2
II.	Alternatives . . . . .	3
III.	Environmental Impacts of the Proposed Action and Its Alternatives . . . . .	4
IV.	Special Considerations . . . . .	6
A.	Environmental Justice . . . . .	6
B.	Protection of Children’s Health . . . . .	7
C.	Endangered and Threatened Species . . . . .	7
V.	Conclusion . . . . .	7
VI.	References . . . . .	8
VII.	Consultation and Review . . . . .	9

# **I. Need for Proposed Action**

## **A. Introduction**

In 1997, the U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), amended Title 7 of the Code of Federal Regulations, Part 319 (7 Code of Federal Regulations (CFR) 319), governing the importation of fresh Hass avocados from Mexico to the United States. The Fruits and Vegetables phytosanitary regulation contained in 7 CFR 319 prohibits or regulates the importation of fruits and vegetables into the United States. The amendment in 7 CFR 319.56–2ff currently allows for the importation of fresh Hass variety avocados (*Persea americana*) from Michoacan, Mexico, into the United States for distribution into the northeastern States under permit issued in accordance with the regulations. The avocados are distributed only during the months of November, December, January, and February in the District of Columbia and the following 19 northeastern States: Connecticut, Delaware, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, and Wisconsin. The imported fruit is only allowed in commercial shipments and under specific conditions established in the regulation. These conditions, including pest surveys in the approved orchards, field sanitation practices, packinghouse procedures, shipping requirements, and various other safeguards, continue to be necessary to prevent the importation of plant pests on Hass avocados from Mexico. The regulation is designed to prevent the introduction and dissemination of fruit flies and other injurious plant pests and diseases that are new or not widely distributed in the United States.

Based on Mexico's recent request and review of the pest risks associated with the importation of avocados from Mexico, APHIS is proposing to expand the program for the importation of Hass avocados from Mexico by adding 12 northern States (Colorado, Idaho, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming) to the list for allowed distribution, and an additional 2 months of the shipping season. This proposal would, therefore, extend the geographical distribution and duration of the shipping season (from 4 months to 6 months). All other conditions and safeguards would remain applicable for the importation of Hass avocados from Mexico.

## **B. Need**

Prior to 1914, avocados were allowed importation into the United States from Mexico. In 1914, U.S. plant health officials prohibited the importation of fresh avocados from Mexico because of the presence of avocado seed weevils (*Heilipus lauri*) in Mexico. In July 1994, Sanidad Vegetal, the plant protection branch of the Mexican Ministry of Agriculture and Water Resources, requested that APHIS allow fresh Hass avocado fruit from approved orchards in approved municipalities in the State of Michoacan, Mexico, to be imported into the northeastern United States. In response to the request from the Government of Mexico, APHIS proposed and implemented a rule to allow fresh Hass avocado fruit from Michoacan, Mexico, to be imported into the northeastern United States. A pest risk assessment was prepared to consider issues related to this request from Mexico for the importation of Hass avocados (USDA, APHIS, 1995) and the findings of that document are incorporated by reference. The Fruits and Vegetables regulation was amended and APHIS published a final rule in February 1997, to provide for fresh Hass avocado fruit grown in Mexico to be imported into the United States subject to certain conditions specified in the regulations.

In September 1999, the Government of Mexico requested APHIS to further expand the importation of Hass avocados into the United States in accordance with the Sanitary Phytosanitary (SPS) agreement under the North American Free Trade Agreement (NAFTA). This proposed change would include increasing the area of limited distribution within the United States and extending the time period for shipment by an additional 2 months. APHIS must consider such request according to the terms agreed to by the United States as a signatory party to NAFTA and the General Agreement on Trade and Tariffs.

APHIS considered Mexico's request and, because of the history of concerns with Mexico's 1994 request to import Hass avocados from approved orchards in Michoacan, Mexico, into the United States, determined a need to prepare an environmental assessment (EA). The EA, Proposed Rule for Mexican Hass Avocado Import Program Expansion, dated June 2001, was prepared to consider the potential for environmental impacts from the proposed changes to the regulation and to allow the interested public an opportunity to comment. The EA complies with the provisions of the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4327) (NEPA), the Council on Environmental Quality's NEPA implementing regulations (40 CFR 1500-1508), and Executive Order 12114, Environmental Effects Abroad of Major Federal Actions.

## II. Alternatives

Three alternatives were considered in the June 2001 EA: (1) the proposed change to the Fruits and Vegetables regulation that would add an additional 12 States to the geographical distribution and extend the shipping season by 2 months (through March and April), (2) the no action alternative, which is the continuation of the importation of Hass avocados from Mexico into the United States, as stated in the current regulation, under specific conditions of entry (no change would be made to the regulation), and (3) a proposed change to the Fruits and Vegetables regulation that would allow for year-round importation to all 50 States and the District of Columbia. In response to public comments received during the EA review process, APHIS has considered a fourth alternative that proposes a change in the Fruits and Vegetables regulation that would add 12 States to the geographical distribution and extend the shipping season by 2 months starting from October 15 through April 15. The alternative for year-round importation to all 50 States and the District of Columbia was discussed and eliminated from further analysis because of the risks associated with potential establishment of quarantine pests of concern as determined by a pest risk assessment (USDA, 1995).

A study by Sequeira *et al.*, 2001, conducted on 4 years of pest trapping considers temperature and the presence of suitable host fruit material and other factors to identify areas in the United States that are not at risk for the introduction of fruit flies. After a review of the temperature and fruit fly survey data for Mexico and phenological data for the United States, it is apparent that the pest risk posed by allowing Hass avocados to be imported during the months of March and April to the current areas and to the additional States would be no greater than it is for the current shipping season of November through February. This is supported by the Sequeira *et al.*, 2001 study which outlines the host availability during the time period within the proposed new States and a review of the monthly results from 4 years of fruit fly detection surveys in the production areas of Mexico. The no action alternative, which is simply the continuation of importation of Hass avocados from Mexico into the United States, as stated in the current regulation (7 CFR 319.56–2ff), was also eliminated as it would not be in concurrence with international agreements to require the pest restriction phytosanitary measures for entry of agricultural products.

Alternatives 1 and 4 are similar in proposing that an additional 12 States be added to the distribution area and the shipping season be expanded from 4 to 6 months. Based on the supporting risk analysis and the public

comments received on the EA, APHIS agrees that revising the extended shipping period from October 15 through April 15 is the preferred alternative. This change will further reduce the possibility that pests imported in Hass avocados could find suitable conditions and host material to support their survival in the approved distribution area. The pest risk analysis and supporting survey documentation support that climatic conditions in the current distribution area and the additional 12 States proposed for the expansion area are less conducive to fruit fly survival in Mexican Hass avocados.

The proposed changes to the regulation allow for Mexican Hass avocados to be imported into an expanded area of limited distribution and for a longer shipping season. This action would increase the availability for avocados and benefit importers, wholesalers, and retailers that import Mexican Hass avocados into the United States, provided that certain requirements are met. These requirements are intended solely to protect the United States from quarantine pests.

The proposed changes in the regulation would allow fresh Hass avocados, grown in approved orchards and municipalities in Michoacan, Mexico, to be imported into the United States and distributed only in the District of Columbia and the States of Connecticut, Delaware, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, Wisconsin, Colorado, Idaho, Iowa, Kansas, Missouri, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming. Importations would only be permitted during the 6-month period of October 15 through April 15. All other strict conditions including pest surveys, pest risk-reducing cultural practices, packinghouse procedures, inspection, shipping procedures, and compliance agreements would also apply.

### **III. Environmental Impacts of the Proposed Action and Its Alternatives**

Environmental impacts associated with implementation of the rule, as proposed, would be as a result of inadvertent release and establishment of avocado plant pests, including three species of seed weevils, one species of stem weevil, one species of seed moth, and several species of exotic fruit flies. Establishment of these plant pests would present a potential threat to U.S. agriculture. In responding to the Mexican proposal, APHIS officials prepared two documents as part of this risk analysis. The first document, dated May 1995, "Risk Management Analysis: A Systems

Approach for Mexican Avocado,” (Miller *et al.*, 1995), is an analysis of the procedures employed to reduce pest risks associated with the importation of Mexican Hass avocado fruit. The second document, dated May 1995, “Importation of Avocado Fruit (*Persea americana*) from Mexico: Supplemental Pest Risk Assessment” (USDA, 1995), includes a quantitative assessment of the likelihood of introducing certain pests with such importations, as well as a quantitative assessment of the consequences of such introductions.

These documents were an important part of the knowledge base for the decision to proceed with a proposed rule. Based on the information collected for the current regulation and additional information collected since that time, APHIS now has sufficient information to consider the Mexican Government’s request for expansion of the regulation to the approved States and a longer shipping season. This information is primarily derived from an Information Memo for the Record (USDA, 2001), a supplemental pest risk assessment (USDA, 1995), an addendum to that risk assessment (USDA, 1996), a document, “Identification of Susceptible Areas for the Establishment of *Anastrepha* spp. Fruit Flies in the United States and Analysis of Selected Pathways” (Sequeira *et al.*, 2001), and 4 years of survey and shipping data on Mexican avocados.

Mexico uses a systems approach (a defined set of phytosanitary measures, at least two of which have an independent effect in mitigation of pest risk associated with the movement of commodities) to successfully export avocados to the United States. Two of the tactics presently used to mitigate pest risk include (1) limiting the geographical distribution of avocados to 19 States and the District of Columbia within the United States, and (2) a 4-month shipping season each year. The pest risk analysis that supported the present regulation, as confirmed by a 4-year survey and shipping data, also supports the proposed expansion of the shipping season and distribution area.

The systems approach program developed by APHIS begins with the Mexican export requirements and adds additional phytosanitary requirements. A risk management analysis was performed on the proposed APHIS program. This analysis concluded that the systems approach acts in a fail-safe manner in that redundant safeguards are built into the process. If one mitigation measure is not completely successful, then one of the other safeguards in place will ensure that the risk of entry of a quarantine pest into the United States into an area where it can become established is insignificant. The system will be closely monitored by APHIS, and any pest detections or irregularities will result in immediate actions to eliminate the pest risk, including the prohibition of importing some or all avocados from Mexico.



APHIS also completed a Supplemental Pest Risk Assessment (as stated above) on the importation of avocado fruit from Mexico. This risk assessment identified nine potential quarantine pests of concern (four fruit flies, three seed weevils, one stem weevil, and one seed moth) based on biology and distribution. It then rated the risk potential of each pest based on five risk elements: climate-host interaction, host range, dispersal potential, economic impact, and environmental impact. The risk assessment then used scenario analysis and quantitative techniques to determine the likelihood of a quarantine pest outbreak.

In the highly unlikely event that an avocado pest should be introduced into the United States, appropriate eradication actions would likely be initiated. Such actions would likely involve the use of pesticides in a localized area. The area affected would likely be small because it is anticipated that any pests would be detected before they became widespread. The weevils and seed moth are specific to avocados and, thus, would only be found in association with avocado trees. The fruit flies are not as host-specific and could be located away from avocado orchards; however, areas where they are most likely to become established are regularly monitored for exotic fruit fly activity. Any analysis of possible actions against exotic pests that may become established would be extremely speculative at this time and would not serve any useful purpose. In the unlikely event that a pest becomes established somewhere in the United States as a result of the importation of Hass avocados from Michoacan, Mexico, and actions are required of APHIS, an environmental analysis would be conducted to look at the site-specific details necessary to eradicate the pest. Any eradication plan or program would not be undertaken before a separate environmental process was completed.

## **IV. Special Considerations**

### **A. Environmental Justice**

Consistent with Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (59 *Federal Register* (FR) 7629–7633), and the Departmental Regulation 5600–2, Environmental Justice, dated December 15, 1997, the proposed expansion of the distribution of Hass avocados will not result in adverse human health or environmental effects on any minority and low-income populations.

### **B. Protection of Children’s Health**

Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks (62 FR 19885–19888), and APHIS’ corresponding Directive 5600.3 (USDA, APHIS, 1999) do not apply to this proposed action. The proposed action presents no risks to the health or safety of children.

### **C. Endangered and Threatened Species**

The Endangered Species Act of 1973 (16 U.S.C. 4332 *et seq.*) requires that Federal agencies review their actions to ensure that they do not jeopardize the continued existence of a federally listed endangered or threatened species (listed species). Further, agencies are required to consult with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service if their actions may adversely affect federally listed species. A review of the proposed action indicates that it will have no effect on federally listed species.

## **V. Conclusion**

APHIS finds that the evidence, assumptions, and conclusions of the 2001 Information Memo for the Record, the 1995 risk management analysis, the 1995 risk assessment, the 1996 supplemental risk assessment, and shipping and inspection data, along with other relevant information, supports the proposed changes in the regulation for importation of Hass avocados. The results of the risk assessment indicate that the risk of a plant pest outbreak occurring from this action if the proposal is adopted and, therefore, the risk to the quality of the human environment, is insignificant.

## VI. References

Miller, C.E., Green, A.S., Harabin, V., and Stewart, R.D., 1995. Risk management analysis: a systems approach for Mexican avocado. May 1995. USDA, APHIS, Riverdale, MD.

Sequeira, R., Millar, L., and Bartels, D., 2001. Identification of susceptible areas for the establishment of *Anastrepha* spp. fruit flies in the United States and analysis of selected pathways. North American Plant Protection Agency, Ottawa, Canada. (In press)

USDA, 1995. Importation of avocado fruit (*Persea americana*) from Mexico: supplemental pest risk assessment. May 1995. USDA, APHIS, PPQ, Riverdale, MD.

USDA, 1996. Importation of avocado fruit (*Persea americana*) from Mexico: supplemental pest risk assessment-Addendum I. Estimates for the likelihood of pest outbreaks based on the draft final rule. USDA, APHIS, PPQ, Riverdale, MD.

USDA, APHIS, 1999. Evaluating APHIS Programs and Activities for Ensuring Protection of Children From Environmental Health Risks and Safety Risks. APHIS Directive 5600.3, dated September 9, 1999. USDA, APHIS, Riverdale, MD.

USDA, APHIS, 2001. Information memo for the record. USDA, APHIS, PPQ, Riverdale, MD. Prepared by Michael J. Firko, Assistant Director, and Edward V. Podleckis, Senior Plant Pathologist, APHIS-PPQ-Permits and Risk Assessment, dated April 30, 2001.

## **VII. Consultation and Review**

Individuals within APHIS staffs were contacted for information or to review documents during the preparation of this environmental assessment. The staff addresses follow.

U.S. Department of Agriculture  
Animal and Plant Health Inspection Service  
Plant Protection and Quarantine  
Phytosanitary Issues Management, Unit 140  
Riverdale, MD 20737-1236

U.S. Department of Agriculture  
Animal and Plant Health Inspection Service  
Policy and Program Development  
Environmental Services, Unit 149  
Riverdale, MD 20737-1238

U.S. Department of Agriculture  
Animal and Plant Health Inspection Service  
Policy and Program Development  
Regulatory Analysis and Development, Unit 118  
Riverdale, MD 20737-1238